

A New Species of *Uroptychus* (Crustacea, Anomura, Chirostylidae)
from off Honshu, Japan

With 1 Text-figure

Keiji BABA

Biological Laboratory, Faculty of Education, Kumamoto University,
Kumamoto 860, Japan

ABSTRACT *Uroptychus benedicti* sp. nov., taken from off Omae-zaki, Honshu, Japan, in a depth of 34 fathoms, is described and illustrated. The new species is closely related to *U. spinulifer* van Dam from the Java Sea, from which it differs in the relative length of the cheliped and the absence of denticular teeth on the abdominal segments.

While studying the galatheid collection made by the U. S. Fisheries Steamer "Albatross" survey 1907–10 to the Philippines, I encountered an interesting and unidentified specimen of the Chirostylidae from another "Albatross" source, in the collection of the National Museum of Natural History, Smithsonian Institution. It was taken at "Albatross" Station 3730, off Omae-zaki Light, Honshu, Japan. Apparently it belongs to the *Uroptychus spinimarginatus* group, but is distinct from the known members of that group.

Uroptychus benedicti sp. nov.

(Fig. 1)

Material. Holotype, male, USNM 150307, "Albatross" Sta. 3730, 14.5 miles off Omae-zaki Light, Honshu, Japan, 34 fathoms, 16 May 1900.

Description of holotype. Carapace wider than long, excluding rostrum; dorsal surface covered with spinules, almost flat, with distinct H-shaped concavity bordering gastric-cardiac regions longitudinally, and branchial-gastrocardiac regions transversely. Lateral margin convex, with several stouter spines along branchial region. Posterior margin concave. Orbit rather small, outer angle delimited by pronounced spine.

Rostrum narrow, triangular in shape, distinctly longer than remaining carapace length; almost straight and horizontal; dorsal surface flat, with spinules; ventral surface carinated longitudinally; lateral margin almost straight and unarmed.

Abdominal segments smooth, devoid of spinules dorsally. Telson divided into anterior and posterior lobes; anterior one-third as long as and narrower than posterior.

Basal segment of antennule somewhat globular; outer terminal process stout, spined at tip, with tiny spine at base. Distal two segments of antennal peduncle subequal in length, both with stout terminal spine; antennal scale more or less narrow, reaching distal end of penultimate segment.

Anterior part of sternal segments as illustrated in Fig. 1 c; surface flat, not distinctly hollowed; anterior margin of third thoracic sternite bearing third maxillipeds concave, with distinct notch at middle; no spine outside of notch; antero-lateral part of following sternite with few but distinct spines.

Third maxilliped normal. Ischium longer than merus; inner distal margin roundly produced; inner toothed ridge well developed, with denticles more or less obsolete. Merus armed with pronounced spine on distal margin. Three spines on outer margin of carpus. Long propodus characteristic of genus.

Chelipeds similar to each other, subequal, less than three times as long as carapace, covered with tiny spines or tubercles. Well developed dorsal spine on ischium; ventral process not prominent. Arm with few more or less pronounced dorsal and inner marginals. Palm moderately depressed, almost equal to subcylindrical wrist on right side, but distinctly longer on left side. Fingers setose, about half as long as preceding segment, crossing each other at tip; cutting edges slightly gaping, each with proximal protuberance.

Walking legs also covered with tubercle-like teeth proximally. First leg slenderer than following two legs; merus with a series of strong spines on outer margin in addition to usual tubercular teeth on surface. Carpus as long as propodus, with row of small spines on outer margin and tubercular teeth on anterior half of dorsal surface; propodus slightly curved inwards, furnished distally with tuft of setae; proximal outer margin with three spinules; pair of spines on inner distal margin; dactylus more than half as long as propodus, bent inwards distally with smooth margins. Second leg similar to third, but merus longer; merus, carpus and propodus similar to those of first leg but much wider; carpus less than half as long as propodus; dactylus wider than that of first, about half as long as propodus, only feebly curved inwards; inner margin with 9 spinelets, penultimate largest of all.

Measurements of holotype (mm).

Length of carapace including rostrum	5.5	
Breadth of carapace	2.9	
Length of cheliped	14.1 (left)	13.9 (right)
Length of wrist	3.7	3.8
Length of palm	4.3	3.9
Breadth of palm	1.1	1.1
Length of finger	2.0	2.0

Remarks. The *spinimarginatus* group, designated here for the first time, is

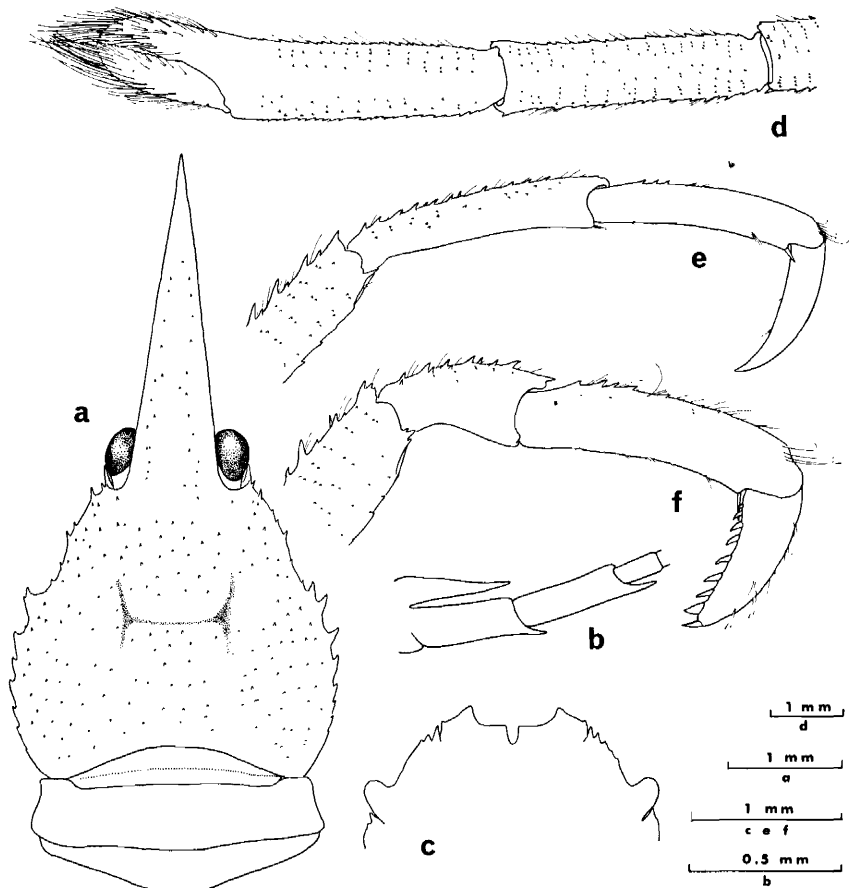


Fig. 1. *Uroptychus benedicti* sp. nov., holotype, male; a, animal in dorsal view, appendages omitted; b, right antennal peduncle; c, anterior part of sternal segments; d, right chela, dorsal view; e, right first walking leg, proximal portion omitted; f, right second walking leg, proximal portion omitted.

characterized by the following: 1) rostrum long and ventrally carinated; 2) lateral margin of the carapace armed with rather pronounced spines; 3) first walking leg slenderer than two following legs. It contains four previously known species, i.e. *Uroptychus spinimarginatus* Henderson, *U. spinulifer* van Dam, *U. grandirostris* Yokoya, *U. mortenseni* van Dam. The carapace is covered with denticular teeth in both *U. spinulifer* and the new species, but they are distinguished from each other by the relative length of the cheliped and the presence or absence of denticular teeth on the abdominal segments. In the unarmed rostral lateral margin this new species resembles *U. mortenseni*, but the latter is covered with fine setae over the entire surface.

ACKNOWLEDGEMENTS

I wish to thank Dr. Fenner A. Chace, Jr. of the Smithsonian Institution who kindly allowed me to study the present material and reviewed the manuscript.

REFERENCES

- Dam, A. J., van, 1939. Über einige *Uroptychus*-Arten des Museums zu Kopenhagen. *Bijdr. Dierk., Leiden*, **27**: 392-407.
- 1940. Anomura, gesammelt vom Dampfer "Gier" in der Java-See. *Zool. Anz.*, **129**: 95-104.
- Henderson, J. R., 1885. Diagnoses of the new species of Galatheidea collected during the "Challenger" Expedition. *Ann. Mag. nat. Hist.*, (5), **16**: 407-421.
- 1888. Report on the Anomura collected by H. M. S. Challenger during the years 1873-76. *Rept. sci. Res. Voyage H.M.S. Challenger, Zool.*, **27**: i-xi + 1-221, pls. 1-21.
- Yokoya, Y., 1933. On the distribution of decapod crustaceans inhabiting the continental shelf around Japan, chiefly based upon the materials collected by S. S. Sôyo-Marû during the years 1923-1930. *J. Coll. Agr. Tokyo Imp. Univ.*, **12**: 1-226.